and the Science Foundation Ireland signed an Agreement on scientific cooperation on 19th January 2006 during the recent visit of the Prime Minister of Ireland.

(b) The Agreement will promote bilateral cooperation between India and Ireland in world-class scientific research in the area of bio-sciences and bio-engineering and information and communication technologies. This will also encourage direct cooperation between scientists for the solution of scientific problems of common interest through exchange of scientific information and exchange of scientists and joint research proposals/projects, where appropriate, under the purview of the Agreement signed.

Research in Nanotechnology

1110. SHRI VIJAY J. DARDA: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether it is a fact that Nanotechnology has far reaching impact on electronics and computing, data storage, materials and manufacturing, energy, environment, healthcare, medicine and transportation;

(b) whether Government propose to conduct any research and training programme in Nanotechnology and if so, what are the target areas of research; and

(c) whether Government propose to formulate any policy guideline in this regard?

THE MINISTER OF SCIENCE AND TECHNOLOGY (SHRI KAPIL SIBAL): (a) Yes, Sir.

(b) and (c) Government is fully aware of the impact and implications of Nanoscience and Nanotechnology. Various Ministries/Departments such as Department of Science and Technology (DST), Defence Research and Development Organization (DRDO), Council of Scientific and Industrial Research (CSIR) and Department of Biotechnology (DBT) have been supporting research projects and some facilities in Nanoscience and Technology. DST has launched a national programme titled 'Nano Science and Technology Initiative (NSTI)' in October 2001. The programme focuses at overall research and development in nanoscience and technology with vigour so that India can become a significant player in the area and contribute to the development of new

technologies besides carrying out basic research at the frontiers. The initiative includes R&D programme, strengthening characterization and infrastructural facilities, creation of centres of excellence, generate trained manpower, interface between educational institutions and industry for applications etc. Target areas of R&D include both basic research in nano science in areas such as DNA chips, molecular electronics, quantum structures including dots, nanotubes & wires, nanobiology, nanofabrication, nanolithography and applied technology oriented research in ares such as composite materials with high strength-to-weight ratio, new biomedical solutions for chronic diseases, new drugs and targeted drug delivery, affordable nanoscale miniaturized medical diagnostic and treatment devices, improvements to computing, sensing, communications, data storage etc. On the manpower development front, advanced schools and International/National symposia and training workshops for research scholars/students have been held. Recognizing the growing scientific importance and emerging technological opportunities in this area of research and to formulate a policy guideline, a national-level consultation among scientists and technologists and S&T agencies (namely DST, DRDO, CSIR, DBT) promoting this area was organized. This consultation process has resulted in a major National programme titled 'Nano Science & Technology Mission (Nano Mission)'. The Nano Mission includes components like R&D programme, development of educational resources, establishing centres of nanotechnology, technology transfer though mechanisms such as public-private partnerships, skilled workforce and to support responsible development of nanotechnology.

Central scheme to assist young scientists

1111. SHRI C. PERUMAL: Will the Minister of SCIENCE and TECHNOLOGY be pleased to state:

(a) whether it has been decided to liberalise the central scheme to assist young scientists;

(b) if so, the details thereof; and

(c) what steps have been taken to check brain drain?

THE MINISTER OF SCIENCE & TECHNOLOGY (SHRI KAPIL SIBAL): (a) to (c) Developing and nurturing of human resource in Science & Technology has always been on top of the Government's agenda. The